APPENDIX OF CLAIMS (37 C.F.R.. 1.192(c)(9))

Claims on Appeal

2. An anti-microbial product comprising an antiperspirant active and an iron (III) chelator, wherein the iron (III) chelator is a micro-molar active anti-microbial agent.

3. An anti-microbial product according to claim 2, wherein the antiperspirant active and the iron (III) chelator are both present in the same composition.

5. An anti-microbial product according to claim 2, having a hardness such that the pressure required to penetrate the composition is less than 0.06 $N.mm^{-2}$.

6. An anti-microbial product according to claim 2, comprising an aerosol composition.

7. An anti-microbial product according to claim 2, wherein the antiperspirant active is an aluminium, zirconium, or mixed aluminium/zirconium salt.

8. (An anti-microbial product according to claim 6, wherein an aluminium halohydrate is a component of the aerosol composition.

9. An anti-microbial composition according to claim 3, wherein the antiperspirant active is an aluminium halohydrate.

10. An anti-microbial product according to claim 2, wherein the iron (III) chelator has a binding coefficient for iron (III) or greater than 10^{26}.

12. An anti-microbial product according to claim 2, wherein the iron (III) chelator has an acid form comprising at least five acid groups.

Chelators

Preferred transition metal chelators have affinity for iron (III), preferably high affinity for iron (III); that is to say, a binding constant for iron (III) of greater than 10^{10}, or, for optimum performance, greater than 10^{26}. The 'iron (III) binding constant' referred to above is the absolute stability constant for the chelator-iron (III) complex. Such values are independent of pH and are measured on the most anionic, fully deprotonated form of the chelator. Measurements can be made potentiometrically, and in a number of other ways. Full details of suitable methods can be found in "Determination and Use of Stability Constants", A. E. Martell and R. J. Motekaitis (VCH, New York, 1989). Tables of applicable values may be found in numerous sources, for example "Critical Stability Constants", R. M. Smith and A. E. Martell (Plenum Pub. Corp., 1977).

Preferred chelators are "micro-molar active"; that is to say, they are able to significantly inhibit the growth of a relevant micro-organism when present, in a medium containing said micro-organism, at a concentration of 3×10^{-6} $mol.dm^{-3}$ or less. Inhibition is considered significant when growth of the relevant micro-organism on a supporting medium can be reduced by at least 30%, preferably by at least 45%. When the surface to be treated is human skin, a relevant micro-organism is *Staphlococcus epidermidis* and chelators capable of achieving significant inhibition include diethylenetriaminepentaacetic acid (DTPA) and triethylenetetraaminehexaacetic acid (TTHA), but exclude

ethylenediaminetetraacetic acid (EDTA) and *trans*-1,2-diaminocyclohexane-N,N,N',N'-tetraacetic acid (CDTA).

The chelator may be used in its acid form, but it may also be used as one of its salts.

The iron (III) chelators used in the present invention preferably have acid forms with at least two, more preferably at least four, and most preferably at least five, ionisable acid groups. The acid groups are preferably carboxylic and/or phosphonic, but may be sulphonic or phosphinic, or any mixture of these groups.

Preferred chelators with phosphonic acid groups are, in the acid form, diethylenetriaminepenta(methylphosphonic) acid (DTPMP), ethanehydroxydiphosphonic acid (EHDP), ethylenediaminetetra(methylenephosphonic acid) (EDTMP), and hexamethylenediaminetetra(methylenephosphonic acid) (HMDTMP).

Particularly suitable chelators for use include polycarboxylate compounds, in particular aminopolycarboxylate compounds. The acid forms of the aminopolycarboxylate compounds include EDTA, CDTA, ethylenediaminedisuccinic acid (EDDS). More preferred aminopolycarboxylate chelators have the acid forms DTPA, TTHA, and ethylenebis[2-(2-hydroxyphenyl)glycine] (EDDHA).

The chelators or salts thereof preferably have only moderate molecular weight, by which it is meant that the chelators, in their acid forms, have a molecular weight of less than 1000, more preferably 200 to 800, and most preferably 290 to